

### **REMARKS**

Claims 1-15 were pending in the Application. Claim 1 is an independent claim and claims 2-10 depend therefrom. Claim 11 is an independent claim and claims 12-15 depend therefrom. Claims 16-22 were previously canceled. Applicants respectfully request reconsideration of the application in light of the following remarks.

#### **Rejections Under 35 U.S.C. § 103(a) – Hughes, AAPA and Garrido (Claims 1-4 and 7-9)**

Claims 1-4 and 7-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hughes et al. (U.S. Publication No. 2001-20038746, hereinafter “Hughes”) in view of Applicants Admitted Prior Art (hereinafter “AAPA”) and further in view of Garrido et al. (U.S. Publication No. 2004-0022318, hereinafter “Garrido”). The Applicants respectfully traverse such rejections.

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 (“MPEP”) states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that “rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art” (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie*

case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

Turning first to independent claim 1, the combination of references cited in the final Office Action at least fails to disclose, for example, “[a] method for producing a high definition video signal comprising: demuxing a high definition program stream into at least one high definition video data stream component and a plurality of companion component data streams; muxing the plurality of companion component data streams with a standard resolution video stream into a standard definition video program stream; demuxing the standard definition video stream to a resolution consistent with the high definition video data stream; scaling the standard definition video stream to a resolution consistent with the high definition video data stream; overlaying the scaled standard definition video stream with the demuxed subpicture data stream; and replacing the standard definition video stream with at least one high definition video data stream to produce a high definition video data signal.”

With regard to “[a] method for producing a high definition video signal comprising: demuxing a high definition program stream into at least one high definition video data stream component and a plurality of companion component data streams,” the final Office Action alleges that the above claim element is disclosed in Hughes’ Fig. 1. As stated in Hughes, “FIG. 1 illustrates a system that separates a high-resolution source image into a base layer and an enhancement layer, and stores the base layer and the enhancement layer in separate tracks on a storage medium.” (Hughes, Paragraph [0015]). Nowhere in Hughes is there any mention of “demuxing a high definition program stream into at least one **high definition video data stream** component and a **plurality of companion component data streams**.” Rather, Hughes discloses separating a high-resolution source image into **a** base layer and **an** enhancement layer. (Hughes, Paragraphs [0027]-[0034]). Further, Hughes discloses that “a standard definition

image is generated by decoding the base layer data. A high-resolution image is generated by decoding and combining **both the base layer data and the enhancement layer data.** (Hughes, Paragraph [0008]).

It is unclear what exactly the final Office Action is interpreting the “at least one high definition video data stream component and a plurality of companion component data streams” to be in Hughes. As shown above, the decoding and combination of both the base layer data and the enhancement layer data make up a high-resolution image in Hughes. Thus, if the final Office Action is interpreting the decoding and combination of both the base layer and the enhancement layer to be the “at least one high definition video data stream component,” then Hughes fails to disclose “a plurality of companion component data streams.” Alternatively, if the final Office Action is interpreting the enhancement layer data to be “at least one high definition video data stream component,” the final Office Action: (1) fails to show “a plurality of companion component data streams” because Hughes’ base layer is not “a plurality of companion component data streams,” and (2) mischaracterizes the Applicant’s definition of “component data streams” as set forth in the Applicant’s specification (*See e.g.*, Applicant’s Specification, Paragraph [0021], Lines 1-6 and Paragraph [0025], Lines 4-7).

Also, the Applicant notes that storing a base layer and enhancement layer in separate tracks on a storage medium does not “produce a high definition video signal.” The Applicant notes that in Hughes, a high-resolution image/stream is not generated until the both the base layer data and the enhancement layer data are decoded and combined. (Hughes, Paragraph [0008]). Thus, Hughes’ disclosed method of storing a base layer and enhancement layer in separate tracks on a storage medium does not teach “[a] method for producing a high definition video signal,” as recited in Applicant’s independent claim 1.

With regard to “muxing the plurality of companion component data streams with a standard resolution video stream into a standard definition video program stream” **and then** “demuxing the standard definition video stream to a resolution consistent with the high definition

video data stream,” the final Office Action alleges that the above claim elements are disclosed in AAPA Fig. 2. However, AAPA Fig. 2 discloses (Step 1) decrypting the program stream; (Step 2) separating the program stream into a standard definition video stream component, a compressed audio stream component, a compressed subpicture stream component and a navigational stream component; (Step 3) sending the compressed video stream component to a video decompression device, the compressed subpicture stream component to a subpicture decode device, the compressed audio stream component to an audio decompression device and the navigational stream component to a system control processor; and (Step 4) mixing the decompressed video and decoded subpicture streams at a video mixer and sent to a standard definition television for viewing while the decompressed audio stream is sent to an audio receiver for playback.

It is unclear what exactly the final Office Action is interpreting the “muxing the plurality of companion component data streams with a standard resolution video stream into a standard definition video program stream” **and then** “demuxing the standard definition video stream to a resolution consistent with the high definition video data stream,” to be in AAPA Fig. 2. First, nowhere in AAPA Fig. 2 is there any disclosure regarding muxing and then demuxing. Second, if the final Office Action is interpreting AAPA’s disclosure of mixing the decompressed video stream and decoded subpicture stream at a video mixer to be “muxing **the plurality of companion component data streams with a standard resolution video stream** into a standard definition video program stream,” the Applicant notes that the decoded subpicture stream is not **a plurality of companion component data streams**.

Further, the final Office Action fails to show how Hughes’ Fig. 1 is combinable with AAPA Fig. 2. As discussed above, Hughes’ Fig. 1 discloses “a system that separates **a high-resolution source image** into a base layer and an enhancement layer, and **stores the base layer and the enhancement layer in separate tracks on a storage medium**.” (Hughes, Paragraph [0015]). AAPA is unrelated to storage of a base layer and enhancement layer on a storage medium and does not receive or deal with high-resolution source images. Rather, AAPA Fig. 2 discloses decrypting, demuxing, decompressing, decoding, mixing and displaying a standard

definition program stream. With regard to the separating the program stream into four components as illustrated in AAPA Fig. 2, Hughes fails to discuss a subpicture stream component, an audio stream component and a navigational stream component. Rather, Hughes merely discusses video information (e.g., base layer data is decoded to generate a standard definition image; and the base layer data and the enhancement layer data is decoded and combined to generate a high-resolution image). AAPA Fig. 2 does not teach separating the standard definition compressed video stream into a base layer and enhancement layer. In fact, such separation would not be possible in AAPA Fig. 2 because in AAPA Fig. 2, a standard definition program stream is received instead of the high-resolution video stream received in Hughes. Thus, the final Office Action has failed to make a *prima facie* case of obviousness because the final Office Action has not made a clear articulation of the reason(s) why the claimed invention would have been obvious. Instead, the final Office Action bases its rejection on mere conclusory statements instead of some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. (*See* the MPEP at § 2142).

With regard to “scaling the standard definition video stream to a resolution consistent with the high definition video data stream” and “overlaying the scaled standard definition video stream with the demuxed subpicture data stream,” the final Office Action alleges that the above claim elements are disclosed in Garrido’s Paragraph [0037]. However, the Applicant initially notes that nowhere in Garrido’s Paragraph [0037] is there any mention of “overlaying the scaled standard definition video stream with the demuxed subpicture data stream.”

Further, the Applicant maintains that (1) Hughes teaches away from the combination with Garrido, and (2) modifying Hughes with Garrido, as proposed by the final Office Action, would render Hughes inoperable for its intended purpose. The Response to Arguments section states that “Hughes discloses the base layer and the enhancement layer are decoded simultaneously [0013]. Since Hughes discloses to generate a high definition signal by combining both the base and enhancement layer data, it is clear to the examiner that Hughes would obviously include scaling the standard definition signal.” (Final Office Action, Page 3, Lines 6-10). However,

Hughes discloses for a standard definition display, “[a] DVD reader reads the base layer data from the default camera angle track of the DVD (step 222). The base layer data is then decoded (step 224). The decoded base layer data is displayed on a standard definition display (step 226), thereby recreating the original sequence of images.” (Hughes, Paragraph [0040], Lines 2-7). **The Applicant notes that for standard definition display, there is no need to “scal[e] the standard definition video stream to a resolution consistent with the high definition video data stream” because the stream is being displayed on a standard definition display.**

Alternatively, Hughes discloses for a high-resolution display, decoding and combining both the base layer and the enhancement layer. (Hughes, Paragraph [0008], Lines 8-10 and Paragraphs [0042]-[0045]). **The Applicant notes that because the decoding and combination of the base layer and the enhancement layer generates a high resolution stream, there is no standard definition video stream to scale.** Combining the enhancement layer and base layer is different than scaling a standard definition video stream. If the final Office Action is interpreting “base layer data” to be “a standard definition video stream,” the Applicant notes that Hughes’ discloses that “a standard definition image is generated **by decoding** the base layer data.” (Hughes, Paragraph [0008]). In other words, the base layer data itself is not a standard definition video stream.

The Response to Arguments section further states that “[i]t is clear to the examiner that it would be obvious to scales the base layer in Hughes to generate the high definition signal.” However, as discussed above, the base layer itself is not a standard definition video stream so it makes no sense to scale the base layer in Hughes. Further, Hughes discloses “a system...that allows both a standard definition version of a video program and a high-resolution version of the same program to be efficiently stored on a single DVD....” (Hughes, Paragraph [0007]). Because the DVD in Hughes stores both a standard definition version and a high-resolution version, it does not make sense to scale the standard definition version when a high-resolution version is already stored and available on the same DVD. Thus, the disclosure of Hughes teaches away from “scaling the standard definition video stream to a resolution consistent with the high definition video data stream,” and adding scaling as taught in Garrido would render

Hughes inoperable for its intended purpose. (*See also*, Non-Final Office Action Response, Arguments on Pages 5-7).

With regard to “replacing the standard definition video stream with at least one high definition video data stream to produce a high definition video data signal,” the final Office Action alleges that the above claim element is disclosed in Hughes’ Paragraph [0044]. However, Hughes’ Paragraph [0044] states that “[t]he outputs of decompressor 304 and decompressor 306 are coupled to a decoding and combining module 308, which decodes and combines the base layer data with the enhancement layer data to generate a high-resolution display 310.” Hughes’ teaching of combining base layer data with enhancement layer data is not the same as “replacing the standard definition video stream with the at least one high definition video data stream to produce a high definition video data signal,” as set forth in Applicant’s independent claim 1.

Accordingly, for at least the reasons stated previously, the Applicants submit that claim 1 is allowable over the combination of references cited in the final Office Action, as are all claims depending therefrom, including claims 2-10. The Applicants also submit that each of claims 2-10 is independently allowable. Thus, the Applicant respectfully requests that the rejections of claims 1-4 and 7-9 under 35 U.S.C. § 103(a), be withdrawn.

**Rejections Under 35 U.S.C. § 103(a) – Hughes, AAPA, Garrido and Mercier (Claims 5-6)**

On Pages 9-10 of the final Office Action, claims 5-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hughes in view of AAPA, in further view of Garrido and further in view of Mercier (U.S. Publication No. 2005/0114909). The Applicant respectfully submits that claims 5-6 depend either directly or indirectly from independent claim 1. Applicant believes that claim 1 is allowable over the proposed combination of references, in that Mercier fails to

overcome the deficiencies of Hughes, in view of AAPA and in further view of Garrido, as set forth above. Because claims 5-6 depend from independent claim 1, Applicant respectfully submits that claims 5-6 are allowable over the proposed combination of Hughes in view of AAPA, in further view of Garrido and further in view of Mercier, as well. Applicant also asserts that each of claims 5-6 is independently allowable. Therefore, for at least the reasons set forth above, Applicant respectfully requests that the rejections of claims 5-6 under 35 U.S.C. §103(a) be withdrawn.

**Rejections Under 35 U.S.C. §103(a) – Hughes, AAPA, Garrido and Chen (Claim 10)**

On Pages 10-11, claim 10 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hughes in view of AAPA, in further view of Garrido and further in view of Chen et al., “A Single-Chip MPEP-2 MP@ML Audio/Video Encoder/Decoder with a Programmable Video Interface Unit,” IEEE, pp. 941-944, 2001 (hereinafter “Chen”). The Applicant respectfully submits that claim 10 depends either directly or indirectly from independent claim 1. Applicant believes that claim 1 is allowable over the proposed combination of references, in that Chen fails to overcome the deficiencies of Hughes in view of AAPA and further in view of Garrido, as set forth above. Because claim 10 depends from independent claim 1, Applicant respectfully submits that claim 10 is allowable over the proposed combination of Hughes in view of AAPA, in further view of Garrido and further in view of Chen, as well. Applicant also asserts that claim 10 is independently allowable. Therefore, for at least the reasons set forth above, Applicant respectfully requests that the rejections of claim 10 under 35 U.S.C. §103(a) be withdrawn.

**Rejections Under 35 U.S.C. § 103(a) – Hughes, AAPA and Garrido (Claims 11-12 and 15)**

Claims 11-12 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hughes in view of AAPA and further in view of Garrido. The Applicants respectfully traverse such rejections.



Turning first to independent claim 11, the combination of references cited in the final Office Action at least fails to disclose, for example, “a high definition program stream demuxer for extracting a plurality of component data streams from a high definition program stream, the plurality of component data streams comprising at least one high definition video data stream and a set of other component data streams; a generator for generating a standard definition video stream; a muxer for combining the generated standard definition video stream with the set of other component data streams into a standard definition program stream; a video scaler for increasing the resolution of the standard definition video stream to a resolution consistent with the high definition video stream; a video mixer for replacing the scaled up standard definition video stream with the high definition video data stream; and an encrypter for creating a high definition video data signal from the high definition video data stream and the set of other component data streams.”

With regard to “a high definition program stream demuxer for extracting a plurality of component data streams from a high definition program stream, the plurality of component data streams comprising at least one high definition video data stream and a set of other component data streams,” the final Office Action alleges that the above claim element is disclosed in Hughes’ Fig. 1. The Applicant notes that in Hughes Fig. 1, there is no disclosure regarding “a high definition program stream demuxer for extracting a plurality of component data streams from a high definition program stream....” Rather, Hughes’ Fig. 1 separates a high-resolution source image into a base layer and an enhancement layer, and stores the base layer and the enhancement layer in separate tracks on a storage medium. (Hughes, Paragraph [0015]). Neither the base layer nor the enhancement layer is a component data stream. Rather, the base layer and enhancement layer is data that once decoded and combined, generate a high resolution image/stream. (Hughes, Paragraph [0008]). The Applicant notes, however, that such decoding and combination does not occur in Fig. 1. Rather, Fig. 1 is related to storing the base layer and enhancement layer in separate tracks on a storage medium. Thus, Hughes’ Fig. 1 cannot disclose “a high definition program stream demuxer for extracting a plurality of component data streams from a high definition program stream, the plurality of component data streams comprising at

least one high definition video data stream and a set of other component data streams,” as set forth in Applicant’s independent claim 11.

Additionally, as stated in Hughes, “FIG. 1 illustrates a system that separates a high-resolution source image into a base layer and an enhancement layer, and stores the base layer and the enhancement layer in separate tracks on a storage medium.” (Hughes, Paragraph [0015]). Nowhere in Hughes is there any mention of “a high definition program stream demuxer for extracting a plurality of component data streams from a high definition program stream, the plurality of component data streams comprising at least one **high definition video data stream** and **a set of other component data streams**.” Rather, Hughes discloses separating a high-resolution source image into **a base layer** and **an enhancement layer**. (Hughes, Paragraphs [0027]-[0034]). Further, Hughes discloses that “a standard definition image is generated by decoding the base layer data. A high-resolution image is generated by decoding and combining **both the base layer data and the enhancement layer data**.” (Hughes, Paragraph [0008]).

It is unclear what exactly the final Office Action is interpreting the “at least one high definition video data stream and a set of other component data streams” to be in Hughes. As shown above, the decoding and combination of both the base layer data and the enhancement layer data make up a high-resolution image in Hughes. Thus, if the final Office Action is interpreting the decoding and combination of both the base layer and the enhancement layer to be the “at least one high definition video data stream,” then Hughes fails to disclose “a set of other component data streams.” Alternatively, if the final Office Action is interpreting the enhancement layer data to be “at least one high definition video data stream,” the final Office Action: (1) fails to show “a set of other component data streams” because Hughes’ base layer is not “a set of other component data streams,” and (2) mischaracterizes the Applicant’s definition of “component data streams” as set forth in the Applicant’s specification (*See e.g.*, Applicant’s Specification, Paragraph [0021], Lines 1-6 and Paragraph [0025], Lines 4-7).

Also, the final Office Action further states that “it is clear to the examiner, that the high definition stream would necessitate the component data streams, as the stream is recorded on a DVD as disclosed by Hughes.” (Final Office Action, Page 11, Lines 11-13). Based on the comments in the final Office Action, it appears as though the final Office Action acknowledges that Hughes fails to explicitly teach the claimed element and instead alleges that, with regard to the “a set of other component data streams,” the high definition program stream demuxer for extracting a set of other component data streams from a high definition stream is an inherent feature of Hughes.

The Applicants submit that a rejection based on inherency must include a statement of the rationale or evidence tending to show inherency. *See* Manual of Patent Examining Procedure at § 2112. “The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” *See id. citing In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

To establish inherency, the extrinsic evidence “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

*In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). The Applicants respectfully submit that neither Hughes itself nor the Office Action “make[s] clear that the missing descriptive matter,” said to be inherent “is necessarily present in” Hughes.

A rejection based on inherency must be based on factual or technical reasoning:

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art.

*Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

The Applicants respectfully submit that the Office Action does not contain a basis in fact and/or technical reasoning to support the rejection based on inherency. Instead, as recited above, at least claim 11 of the present application stands rejected based on a conclusory statement of inherency, rather than upon a “basis in fact and/or technical reasoning.” Accordingly, the Applicants respectfully submit that, absent a “basis in fact and/or technical reasoning” for the rejection of record, that rejection should be reconsidered and withdrawn.

With regard to “a generator for generating a standard definition video stream,” the final Office Action alleges that the above claim element is disclosed in Hughes’ Fig. 1, 104, base layer generator. The Applicant notes that “[t]he base layer generator 104 generates a base layer portion of the source image 100 and communicates the base layer to a compressor 108.” (Hughes, Paragraph [0029]). As discussed above, a base layer is different than a standard definition video stream in that the base layer data needs to be decoded to generate a standard definition image/stream. (Hughes, Paragraph [0008]). Thus, Hughes’ base layer generator 104 is different than “a generator for generating a standard definition video stream,” as recited in Applicant’s independent claim 11.

With regard to “a muxer for combining the generated standard definition video stream with the set of other component data streams into a standard definition program stream,” the final Office Action alleges that the above claim element is disclosed in AAPA Fig. 2. The Applicant notes that “[t]he base layer generator 104 generates a base layer portion of the source image 100 and communicates the base layer to a compressor 108.” (Hughes, Paragraph [0029]). As discussed above, a base layer is different than a standard definition video stream in that the base layer data needs to be decoded to generate a standard definition image/stream. (Hughes, Paragraph [0008]). Thus, Hughes’ base layer generator 104 is different than “a generator for

generating a standard definition video stream,” as recited in Applicant’s independent claim 11. As discussed above with regard to independent claim 1, if the final Office Action is interpreting AAPA’s disclosure of mixing the decompressed video stream and decoded subpicture stream at a video mixer to be “a muxer for combining the generated standard definition video stream with the **set of other component data streams** into a standard definition program stream,” the Applicant notes that the decoded subpicture stream is not **a set of other component data streams**.

Further, as mentioned above, the final Office Action fails to show how Hughes’ Fig. 1 is combinable with AAPA Fig. 2. Hughes’ Fig. 1 discloses “a system that separates **a high-resolution source image** into a base layer and an enhancement layer, and **stores the base layer and the enhancement layer in separate tracks on a storage medium**.” (Hughes, Paragraph [0015]). AAPA is unrelated to storage of a base layer and enhancement layer on a storage medium and does not receive or deal with high-resolution source images. Rather, AAPA Fig. 2 discloses decrypting, demuxing, decompressing, decoding, mixing and displaying a standard definition program stream. With regard to the separating the program stream into four components as illustrated in AAPA Fig. 2, Hughes fails to discuss a subpicture stream component, an audio stream component and a navigational stream component. Rather, Hughes merely discusses video information (e.g., base layer data is decoded to generate a standard definition image; and the base layer data and the enhancement layer data is decoded and combined to generate a high-resolution image). AAPA Fig. 2 does not teach separating the standard definition compressed video stream into a base layer and enhancement layer. In fact, such separation would not be possible in AAPA Fig. 2 because in AAPA Fig. 2, a standard definition program stream is received instead of the high-resolution video stream received in Hughes. Thus, the final Office Action has failed to make a *prima facie* case of obviousness because the final Office Action has not made a clear articulation of the reason(s) why the claimed invention would have been obvious. Instead, the final Office Action bases its rejection on mere conclusory statements instead of some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. (See the MPEP at § 2142).

With regard to “a video scaler for increasing the resolution of the standard definition video stream to a resolution consistent with the high definition video stream,” the final Office Action alleges that the above claim element is disclosed in Garrido’s Paragraph [0037]. However, the Applicant maintains that (1) Hughes teaches away from the combination with Garrido, and (2) modifying Hughes with Garrido, as proposed by the final Office Action, would render Hughes inoperable for its intended purpose. The Response to Arguments section states that “Hughes discloses the base layer and the enhancement layer are decoded simultaneously [0013]. Since Hughes discloses to generate a high definition signal by combining both the base and enhancement layer data, it is clear to the examiner that Hughes would obviously include scaling the standard definition signal.” (Final Office Action, Page 3, Lines 6-10). However, Hughes discloses for a standard definition display, “[a] DVD reader reads the base layer data from the default camera angle track of the DVD (step 222). The base layer data is then decoded (step 224). The decoded base layer data is displayed on a standard definition display (step 226), thereby recreating the original sequence of images.” (Hughes, Paragraph [0040], Lines 2-7). **The Applicant notes that for standard definition display, there is no need for a “video scaler for increasing the resolution of the standard definition video stream to a resolution consistent with the high definition video stream” because the stream in Hughes is being displayed on a standard definition display.**

Alternatively, Hughes discloses for a high-resolution display, decoding and combining both the base layer and the enhancement layer. (Hughes, Paragraph [0008], Lines 8-10 and Paragraphs [0042]-[0045]). **The Applicant notes that because the decoding and combination of the base layer and the enhancement layer generates a high resolution stream, there is no standard definition video stream to scale.** Combining the enhancement layer and base layer is different than scaling a standard definition video stream. If the final Office Action is interpreting “base layer data” to be “a standard definition video stream,” the Applicant notes that Hughes’ discloses that “a standard definition image is generated **by decoding** the base layer data.”

(Hughes, Paragraph [0008]). In other words, the base layer data itself is not a standard definition video stream.

The Response to Arguments section further states that “[i]t is clear to the examiner that it would be obvious to scale the base layer in Hughes to generate the high definition signal.” However, as discussed above, the base layer itself is not a standard definition video stream so it makes no sense to scale the base layer in Hughes. Further, Hughes discloses “a system...that allows both a standard definition version of a video program and a high-resolution version of the same program to be efficiently stored on a single DVD....” (Hughes, Paragraph [0007]). Because the DVD in Hughes stores both a standard definition version and a high-resolution version, it does not make sense to scale the standard definition version when a high-resolution version is already stored and available on the same DVD. Thus, the disclosure of Hughes teaches away from “a video scaler for increasing the resolution of the standard definition video stream to a resolution consistent with the high definition video stream,” and adding scaling as taught in Garrido would render Hughes inoperable for its intended purpose. (*See also*, Non-Final Office Action Response, Arguments on Pages 5-7).

With regard to “a video mixer for replacing the scaled up standard definition video stream with the high definition video data stream,” the final Office Action alleges that the above claim element is disclosed in Hughes’ Paragraph [0044]. However, Hughes’ Paragraph [0044] states that “[t]he outputs of decompressor 304 and decompressor 306 are coupled to a decoding and combining module 308, which decodes and combines the base layer data with the enhancement layer data to generate a high-resolution display 310.” Hughes’ teaching of combining base layer data with enhancement layer data using a decoding and combining module is not the same as “a video mixer for **replacing the scaled up standard definition video stream with the high definition video data stream.**” As mentioned above, Hughes teaches either (1) generating a standard definition image by decoding the base layer data if for a standard definition display, **or** (2) generating a high-resolution image by decoding and combining both the base layer data and the enhancement layer data if for a high-resolution display. Nowhere in Hughes is

there any disclosure of **replacing the scaled up standard definition video stream with the high definition video data stream,**” as set forth in Applicant’s independent claim 11.

With regard to “an encrypter for creating a high definition video data signal from the high definition video data stream and the set of other component data streams,” the final Office Action alleges that the above claim element is disclosed in Garrido’s Paragraph [0063] and further states that “it is clear to the examiner since Garrido discloses encrypting the video, it would be necessitate the use of an encrypter.” (Final Office Action, Page 13, Lines 1-2). However, Garrido’s Paragraph [0063], in its entirety, states that “[c]lassification also forces unimportant codevectors that do not strongly fall into any class to merge with like codevectors.” (Garrido, Paragraph [0063]). Even if Garrido’s Paragraph [0063] necessitated the use of an encrypter as alleged by the final Office Action (which it does not), the combination of references still fails to disclose “an encrypter **for creating a high definition video data signal from the high definition video data stream and the set of other component data streams.**” As mentioned above, the final Office Action has failed to make a *prima facie* case of obviousness because the final Office Action has not made a clear articulation of the reason(s) why the claimed invention would have been obvious. Instead, the final Office Action bases its rejection on mere conclusory statements instead of some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. (*See* the MPEP at § 2142).

Accordingly, for at least the reasons stated previously, the Applicants submit that claim 11 is allowable over the combination of references cited in the final Office Action, as are all claims depending therefrom, including claims 12-15. The Applicants also submit that each of claims 12-15 is independently allowable. Thus, the Applicant respectfully requests that the rejections of claims 11-12 and 15 under 35 U.S.C. § 103(a), be withdrawn.



**Rejections Under 35 U.S.C. § 103(a) – Hughes, AAPA, Garrido and Mercier (Claims 13-14)**

On Pages 13-14 of the final Office Action, claims 13-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hughes in view of AAPA, in further view of Garrido and further in view of Mercier. The Applicant respectfully submits that claims 13-14 depend either directly or indirectly from independent claim 11. Applicant believes that claim 11 is allowable over the proposed combination of references, in that Mercier fails to overcome the deficiencies of Hughes, in view of AAPA and in further view of Garrido, as set forth above. Because claims 13-14 depend from independent claim 11, Applicant respectfully submits that claims 13-14 are allowable over the proposed combination of Hughes in view of AAPA, in further view of Garrido and further in view of Mercier, as well. Applicant also asserts that each of claims 13-14 is independently allowable. Therefore, for at least the reasons set forth above, Applicant respectfully requests that the rejections of claims 13-14 under 35 U.S.C. §103(a) be withdrawn.

**Final Matters**

As a final matter, the Office Action makes various statements regarding former claims 1-15, the Hughes reference, the AAPA, the Garrido reference, the Mercier reference, the Chen reference, 35 U.S.C. § 103(a), and one of skill in the art, etc. that are now moot in light of the previous comments and/or amendments. Thus, the Applicants will not address all of such statements at the present time. However, the Applicants expressly reserve the right to challenge any or all of such statements in the future should the need arise (*e.g.*, if such statements should become relevant by appearing in a rejection of any current or future claim). Further, Applicants reserve the right to argue additional reasons supporting the allowability of claims 1-15 should the need arise in the future.

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Resp. to final Office Action of May 28, 2008  
Resp. dated July 25, 2008

### CONCLUSION

Applicant respectfully submits that claims 1-15 are in condition for allowance, and requests that the application be passed to issue.

Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Date: July 25, 2008

Respectfully submitted,

/Philip Henry Sheridan/  
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